

## ABSTRACT

A luminance detected by a built-in photosensor and a luminance of light emitted from a backlight through a liquid crystal panel are measured in a plurality of states where the backlight has a different luminance, and are preliminarily stored in a storage unit. Moreover, a luminance of light emitted through the liquid crystal panel in each input level when the maximum luminance of light emitted through the liquid crystal panel is a predetermined value is measured and is preliminarily stored in the storage unit. The maximum luminance of light emitted through the liquid crystal panel is then accepted, the luminance of the backlight is controlled, the luminance in each input level and an ideal luminance in each gray level are calculated, and an input level which gives a luminance substantially equal to the ideal luminance in each gray level is obtained to update an LUT.